

CHAPTER 1 SECTION 18.5

ELECTROCARDIOGRAM (ECG)

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I. PROCEDURE CODE

93000

II. DESCRIPTION

A standard 12-lead electrocardiogram (ECG), with or without a rhythm strip or other special leads, that has been interpreted by a physician qualified to interpret ECGs and that has been made part of the patient's medical record. In children and selected adults, it may be necessary to record additional leads.

III. POLICY

Benefits are available on an inpatient or outpatient basis for services and supplies provided in connection with ECGs when ordered by a physician and provided by a TRICARE-authorized institutional or individual professional provider subject to the provisions of the "Policy Considerations" section below.

IV. POLICY CONSIDERATIONS

A. Electrocardiograms are covered when administered according to the guidelines of the American College of Cardiology (ACC) and the American Heart Association (AHA).

1. The ACC/AHA guidelines for which an ECG may be cost-shared for patients with known cardiovascular disease are as follows:

- a. To obtain a baseline or initial evaluation.
- b. Subsequent ECGs to evaluate the patient's short-term and long-term responses to therapy.
- c. In patients with acute ischemia, serial ECGs are appropriately used to monitor responses to thrombolytic or anti-ischemic therapy or to verify spontaneous recovery.
- d. In patients who have undergone coronary angioplasty or other intracardiac invasive procedure or electrophysiologic ablative procedure, serial ECGs are warranted until

the condition is stable and again shortly before discharge in all patients, including those with uncomplicated procedures.

e. For patients in whom antiarrhythmic drug therapy is initiated, serial ECGs may be useful to assess conversion to normal sinus rhythm, changing rhythm, QRS duration, prolongation of the QT interval or proarrhythmia.

f. In patients receiving drug therapy with potential cardiac effects.

g. In patients undergoing electrical or pharmacologic cardioversion of ventricular tachycardia, supraventricular tachycardia, atrial fibrillation or atrial flutter should have an ECG just before and immediately after the procedure and before hospital discharge.

h. After pacemaker insertion or revision, whenever pacemaker malfunction is suspected, after lead threshold maturation, and at periodic intervals throughout the lifetime of the patient and the pacing system. This is commonly done on a monthly basis via telephone. For further information regarding telephonic monitoring, see [Chapter 1, Section 19.1](#).

i. After cardiac surgery or extensive pulmonary surgery including transplantation, serial ECGs are recommended until the condition is stable and shortly before the patient's discharge.

2. The ACC/AHA guidelines for ECGs in patients who are suspected of having or who are at increased risk of developing cardiovascular disease or dysfunction are:

a. To obtain a baseline or initial evaluation.

b. Initial assessment for patients entering the emergency room.

3. The AC/AHA guidelines to assess the response to therapy of patients suspected, or at increased risk of developing cardiovascular disease or dysfunction are:

a. To assess therapy with cardiactive drugs in patients with suspected cardiac disease. For example, the use off beta-blocker drugs in patients with palpitation, tremor or migraine headaches.

b. To assess the response to the administration of any agent known to result in cardiac abnormalities or ECG abnormalities. For example, antineoplastic drugs, lithium, tranquilizers, and anticonvulsant and antidepressant agents.

c. To assess the response to administration of any agent known to alter serum electrolyte concentrations. For example, diuretic drugs in hypertensive patients or when the potassium or magnesium concentration is suspected or known to be altered into or near the abnormal range.

d. To evaluate the presence of any change in clinical status or laboratory findings suggesting the interval development of cardiac disease or dysfunction.

e. The periodic follow-up, for example every 1 to 5 years, of patients known to be at increased risk for the development of cardiac disease.

f. The follow-up of patients after the resolution of chest pain.

4. The ACC/AHA guidelines for ECGs to obtain a baseline or initial evaluation in patients with no apparent or suspected heart disease or dysfunction are:

a. To evaluate patients before administration of pharmacologic agents that are known to have a high incidence of cardiovascular effects (for example, chemotherapy of malignancies).

b. To evaluate persons before exercise stress testing.

5. The ACC/AHA guidelines for ECGs to assess the response to therapy in patients with no apparent heart disease or dysfunction is to evaluate patients in whom prescribed therapy (for example, doxorubicin) is known to produce cardiovascular effects.

6. The ACC/AHA guidelines for the preoperative evaluation of patients with no apparent heart disease or dysfunction are:

a. The patient is over 40 years of age.

b. The patient is being evaluated as a donor for heart transplantation or as a recipient of a non-cardiopulmonary transplant.

B. Long-term ECG monitoring (CPT Code 93224-93237).

1. Long-term ECG monitoring, also referred to as long-term ECG recording, Holter recording, or dynamic electrocardiography, is a diagnostic procedure which provides a continuous record of the electrocardiographic activity of patient's heart while the patient is engaged in daily activity.

2. Examples of when long-term monitoring may be cost-shared by TRICARE include, but are not limited to, the following:

a. At the time of anti-arrhythmic drug therapy and may be performed during the course of therapy to evaluate response;

b. Before and after the discontinuation of anti-arrhythmic medication;

c. To assess patients with coronary artery disease and;

d. To enable the correlation of chest symptoms with the objective evidence of ST-segment abnormalities.

e. For patients with obscure etiology suggestive of cardiac arrhythmia such as palpitations, chest pain, dizziness, light-headedness, near syncope, syncope, transient ischemic episodes, dyspnea, and shortness of breath.

3. The recording device furnished to the patient is simply one component of the diagnostic system and a separate charge for it will not be recognized.

C. Patient Activated ECG Recorders.

1. Patient activated ECG recorders are covered for evaluating patients with symptoms of obscure etiology suggestive of cardiac arrhythmia such as palpitations, chest pain, dizziness, light-headedness, near syncope, syncope, transient ischemic episodes, dyspnea, and shortness of breath.

2. Reimbursement is done by either:

a. Procedure code 93268 using a global rate to include transmission, physician review, and interpretation, per 30 day period of time; or

b. Procedure codes 93270, 93271, and 93272 when different providers are providing the components.

D. Payments.

1. Portable ECG Services. Portable ECG services are covered so long as they meet the standards contained in Medicare Regulation sections 405.1411ff. In addition to the specific ECG services, reasonable transportation and set-up charges are covered and separately reimbursable.

V. EXCEPTIONS

Other conditions not included on the above list may be considered for coverage on a case-by-case basis, when medical review determines the care is medically necessary.

VI. EXCLUSIONS

A. ECGs may not be cost-shared when the following indications are present:

1. Routine screening or baseline ECGs in asymptomatic persons less than 40 years of age with no risk factors unless the patient is being admitted to an inpatient institution for surgical procedure which involves general anesthesia.

2. To assess treatment that is known not to produce any cardiovascular effects.

3. To evaluate asymptomatic adults who have had no interval change in symptoms, signs or risk factors and who have had a normal ECG within a six-month period.

B. An ECG that has been interpreted by a computer alone is not recognized as a properly interpreted ECG. The term ECG does not refer to continuous ambulatory electrocardiography (AKA Holter monitor), monitor leads, rhythm strips, exercise testing, transtelephonic recording, or intracardiac electrograms. Refer to [Chapter 3, Section 5.1](#), regarding other services and supplies required in the diagnosis and treatment of illness or injury involving the cardiovascular system.

C. Signal-averaged ECGs are considered unproven and may not be cost-shared. See [Chapter 8, Section 14.1](#).

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